I hereby certify that this paper is being deposited today with the U.S. Postal Service as Express Mail addressed to the Assistant Commissioner for Patents, P.O. Box 1450,

EU 316953997 US

11 DIVI NIL	_1	App U.S. Patent and Trade	emark Office. U.S. DEPARTMENT OF					
Moderate Contraction	Paperwork Reduction Act of 1995, no persons are required	to respond to a collection of inform	ation unless it displays a valid OMB cor					
•	/ UTILITY	Attorney Docket No.	16-453C1					
r		First Inventor	Bryon C. Clayton					
ŀ	PATENT APPLICATION		GLASS OPTIMIZATION					
	TRANSMITTAL	Title						
(Only for new nonprovisional applications under 37 CFR 1.53(b))		Express Mail Label No.	EV 316953997 US					
			Mail Stop Patent Application Commissioner for Patents					
APPLICATION ELEMENTS		ADDRESS TO:	P.O. Box 1450					
See MPEP	chapter 600 concerning utility patent application contents.		Alexandria VA 22313-1450					
1. Fee	Fransmittal Form (e.g., PTO/SB/17)	7. CD-ROM or C	D-R in duplicate, large table or					
(Subn	nit an original and a duplicate for fee processing)	Computer Pro	gram (Appendix)					
2. 🗷 Appli	cant claims small entity status.	8. Nucleotide and/or	Amino Acid Sequence Submission					
	37 CFR 1.27.	(if applicable, all ne	cessary)					
3. Spec	ification [Total Pages 16]	a. Compute	er Readable Form (CRF)					
	erred arrangement set forth below) criptive title of the invention	b. Specifica	ation Sequence Listing on:					
	ss Reference to Related Applications	u. Specifica	b. Specification Sequence Listing on.					
- Stat	tement Regarding Fed sponsored R & D	i 🔲 cr	i. CD-ROM or CD-R (2 copies); or					
	erence to sequence listing, a table,	,. — OL). — OB ((OM of OB)) (2 oop)(oo)) o.					
	computer program listing appendix skground of the Invention	ii. 🔲 Pa	ii. Paper					
- Brie	of Summary of the Invention		Control of the Manufacture of above applies					
	of Description of the Drawings (if filed)							
- Det - Clai	ailed Description im(s)	ACCOMPA	NYING APPLICATION PAR					
	stract of the Disclosure							
		9. Assignment	Papers (cover sheet & document(
4. 🗸 Drav	ving(s) (35 U.S.C. 113) [Total Sheets7] 10. 37 CFR 3.73	3(b) Statement Power of					
	I the ITatal Shoots 2	(when there	is an assignee) Attorney					
5. Oath or D			nslation Document (if applicable) Disclosure Copies of					
a. Lvj. N	lewly executed (original or copy)	12. Information						
ь. 🥅 с	copy from a prior application (37 CFR 1.63(d))		IDS)/PTO-1449 Citation: Amendment					
	for continuation/divisional with Box 18 completed)		eipt Postcard (MPEP 503)					
\ '	, ,		specifically itemized)					
i.	DELETION OF INVENTOR(S)	15. Certified Co	py of Priority Document(s)					
	Signed statement attached deleting inventor(s)	(if foreign p	riority is claimed)					
ĺ	name in the prior application, see 37 CFR	16. Nonpublica	tion Request under 35 U.S.C. 122					
	1.63(d)(2) and 1.33(b).	(b)(2)(B)(i).	Applicant must attach form PTO/S					
6.	oplication Data Sheet. See 37 CFR 1.76	or its equiva	alent. TEL TO EXAMEPER					
, o. 🗀 🔒	phodulon bala chool cos of all the	17. 🖾 Other: 🛵	IEL IO CAMILION					
			ion holow and in the first sentence					
18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:								
	=		prior application No.: 10/646.191					
	numbation <u>E Divisional</u>							
Prior application information: Examiner Art Unit: For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied un								
I sk is considered a part of the disclosure of the accompanying continuation of divisional application and is never incorporated by reference.								
The incorpora	ation <u>can only</u> be relied upon when a portion has been in	nadvertently omitted from the su	bmitted application parts.					
	19. CORRES	PONDENCE ADDRESS						
			C					
Cust	tomer Number:	OR	Correspondence address b					
Name	me Michael A. Miller							
	Watts Hoffman Co., LPA							
Address	1100 Superior Avenue, Suite 1750							
		State OH	Zip Code 44114					
	Cleveland	Telephone 216/241-6700						
	lus . 1 /	2 10/24 1-0/00	2 10/2					
Country		Registration No. (Attor	mey/Agent) 50,732					

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



With the	Mail Label No. CV3/69.5399715 y certify that this paper is being deposited today b U.S. Postal Service as Express Mail addressed seistant Commissioner for Patents, P.O. Box 1450, Iria, VA 22313-1450 Under the Paperwork Reduction Act of 1995, no persons are required	d to res	spond to	U.S. Patent and a collection of	Approved for use through 07/31 Trademark Office; U.S. DEPART information unless it displays a val	PTO/SB/17 (10-03) 1/2006. OMB 0651-0032 MENT OF COMMERCE lid OMB control number.
on #	A FEE TO ANCIAITTAL					
Ву:	ARTICLE TRANSMITTAL	- [Application Number 10688654			54
計量	は / c = 1/2004		Filing	Date	October 17, 2003	
	≇ ′ for FY 2004	_	First Named Inventor Bryon C. Clatyon			
	Effective 10/01/2003. Patent fees are subject to annual revision.	ŀ	Thou value in the same of the			
	Applicant claims small entity status. See 37 CFR 1.27	Examiner Name				
ĕ	<u> </u>	Art Unit				
	TOTAL AMOUNT OF PAYMENT (\$) 576.00		Attorn	ey Docket No	. 16-453C1	
	METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)				
ţ.	Check Credit card Money Other None	3. ADDITIONAL FEES				
	Order U	Large Entity Small Entity				
	Deposit Account:	Fee Code		Fee Fee Code (\$)	Fee Description	Fee Paid
	Deposit Account 23-0630	1051	130	, ,	Surcharge - late filing fee or oath	
	Number Deposit Water Heffmann Co. I DA	1052	50	2052 25	Surcharge - late provisional filing fe	e or
	Deposit Account Name Watts Hoffmann Co., LPA	4050	420		cover sheet Non-English specification	
	The Director is authorized to: (check all that apply)	1053	130 2,520		For filing a request for ex parte ree	xamination
	Charge fee(s) indicated below Credit any overpayments	1804		1804 920* 1	Requesting publication of SIR prior	
	Charge any additional fee(s) or any underpayment of fee(s)			1	Examiner action	
	Charge fee(s) indicated below, except for the filing fee	1805	1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	· -
•	to the above-identified deposit account.	1251	110	2251 55	Extension for reply within first mon	ıth
	FEE CALCULATION	1252	420	2252 210	Extension for reply within second	month
	1. BASIC FILING FEE Large Entity Small Entity	1253	950	2253 475	Extension for reply within third mo	nth
	Fee Fee Fee Fee Fee Description Fee Paid	1254	1,480	L	Extension for reply within fourth m	1 1
•	Code (\$) Code (\$) 1001 770 2001 385 Utility filing fee	1255	2,010	2255 1,005	Extension for reply within fifth mor	nth
	1001 770 2001 385 Outlity litting fee 385.00	1401	330	2401 165	Notice of Appeal	
	1003 530 2003 265 Plant filing fee	1402	330		Filing a brief in support of an appe	eal
	1004 770 2004 385 Reissue filing fee	1403	3 290	lt.	Request for oral hearing	
	1005 160 2005 80 Provisional filing fee		1,510	1	Petition to institute a public use pr	oceeding
	SUBTOTAL (1) (\$) 385.00	1452	2 110		Petition to revive - unavoidable	
	2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE		3 1,330		Petition to revive - unintentional	
	Fee from Extra Claims below Fee Paid	1502	1 1,330 2 480		Utility issue fee (or reissue) Design issue fee	
	Total Claims 32 -20** = 12 X 108 = 108	1502		l .	Plant issue fee	
	Independent $4 = 3^{**} = 1 \times 43 = 43$	1460			Petitions to the Commissioner	
	Claims Multiple Dependent 0 =0	1807		i	Processing fee under 37 CFR 1.1	17(q)
	Large Entity Small Entity	1806		1806 180	Submission of Information Disclos	sure Stmt
	Fee Fee Fee Fee <u>Fee Description</u> Code (\$) Code (\$)	802		8021 40	Recording each patent assignmen	nt per 40.00
	1202 18 2202 9 Claims in excess of 20				property (times number of property) Filing a submission after final reje	ues) ———
	1201 86 2201 43 Independent claims in excess of 3	1809	9 770	2809 385	(37 CFR 1.129(a))	
	1203 290 2203 145 Multiple dependent claim, if not paid	181	0 770	2810 385	For each additional invention to b	e l
	1204 86 2204 43 ** Reissue independent claims	400	14 770	2801 295	examined (37 CFR 1.129(b)) Request for Continued Examina	tion (RCE)
	over original patent	180 180			Request for expedited examinat	
	1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent	, ,,,,	_ 000	1 '55- 500	of a design application	
	SUBTOTAL (2) (\$) 151.00	Other fee (specify)				
	**or number previously paid, if greater; For Reissues, see above	*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40.00				
	SUBMITTED BY	(Complete (if applicable))				

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Registration No.

50,732

Telephone 216/241-6700

10/17/03

Michael A

Name (Print/Type)

Signature

Miller